

## ABSTRACT

A resin film is formed on the surface of a hot dip galvanized steel sheet by applying emulsion of a polyolefin copolymer resin molecular-associated by ion cluster to the steel sheet surface. The resin film contains, in terms of solids content, 10 to 55 mass % of silica particles, 1 to 8 mass % of a crosslinking agent, and 1 to 8 mass % of tannic acid and/or ammonium vanadate. The resin-coated hot dip galvanized steel sheet is capable of exhibiting well-balanced superior characteristics in weldability, corrosion resistance, and machinability.